CLAIMS

1. An electrical steel sheet for a low-noise transformer, characterized by having a viscoelastic layer 30 μm or more in thickness on at least one of the surfaces of the steel sheet.

2. An electrical steel sheet for a low-noise transformer, according to claim 1, having an viscoelastic layer whose loss factor has one or more peaks at temperatures within the range from 20 to 200°C.

3. A low-noise transformer formed by using an electrical steel sheet for a low-noise transformer according to claim 1 or 2.

4. A low-noise transformer characterized in that the transformer core formed by laminating n pieces of electrical steel sheets has viscoelastic layers 30 μm or more in thickness placed at m gaps among the n-1 gaps of laminated layers, m satisfying the following formula:

$3 \leqq (n-1)/m \leqq 30$.

5. A low-noise transformer characterized by inserting viscoelastic layers, at random, in a core formed by using an electrical steel sheet for a low-noise transformer according to claim 1 or 2.